



FEMA

Mitigation Efforts Prove Successful In Flood Fight Along the Red River

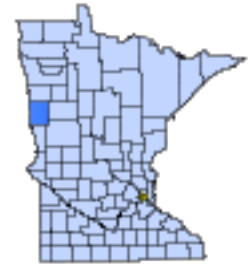
Moorhead, MN – Moorhead has seen its share of flooding over the past two decades. In 1994, 1997, and 2002, the City of Moorhead took part in FEMA's Hazard Mitigation Grant Program (HMGP) to mitigate flooding and reduce future flood losses. A total of eight repetitive loss properties in 1994, sixteen homes damaged in the 1997 flood, and two additional repetitive loss homes in 2002 have been acquired through the HMGP.

When Mary and Bill Flickinger bought their home in Moorhead in 1983, it was a great location to raise children. Their backyard abutted the Red River and they felt like they were living in the country yet had the conveniences of the nearby city. Unfortunately, the Flickingers' close proximity to the river became hazardous. From 1983 to 1997, the couple laid sandbags to save their home on three occasions. In the flood of April 1997 (the second highest on record), a sandbag dike rose six feet high just outside the door to the Flickingers' house. From the walkout-level family room, the river rushed by at eye level. With the help of family, friends, and their church, the Flickingers were able to keep water out of the home.

Two months later, more heavy rains fell. The Flickingers' home had made it through the April flood only to have water seep through the foundation in June. Mr. Flickinger asked a friend who was an engineer to inspect house; they discovered that the foundation had moved. The saturated soils from the April flood had caused the house to shift and become structurally unsound. The heavy rain in June then revealed this problem to the homeowners. In response, Mr. Flickinger consulted with City of Moorhead officials and their house was included in a city acquisition project. The City was interested in the property because it abutted the water intake facility for the City's drinking water system. The home was purchased and demolished with the help of FEMA's HMGP acquisition program and the Flickinger family moved to an area known as the Meadows Subdivision.

In 2006, the fifth highest flood on record hit the Moorhead area. This time damage from floodwaters along the Red River was minimal thanks to the buyouts and a sandbag dike. The Flickingers old riverfront home would have been under water during the event.

The City of Moorhead has made many improvements using a variety of Federal and state mitigation funds. For example, dikes have been constructed, storm sewer control gates have been installed, and flood models have been produced. The City also installed sanitary sewer isolation valves on homes remaining in the floodplain and a concrete liner on a ditch to safely move overland floodwater through the city. Sand bagging is necessary in some areas when the river level reaches 35 feet. In 2006, approximately 100 property owners constructed dikes to protect their homes to the 38 foot flood stage.



Clay County,
Minnesota



Quick Facts

Year:

1997

Sector:

Public/Private Partnership

Cost:

Amount Not Available

Primary Activity/Project:

Acquisition/Buyouts

Primary Funding:

Hazard Mitigation Grant Program (HMGP)